2002



PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification of (Form PCT/ISA/2	of Transmittal of International Search Report (20) as well as, where applicable, item 5 below.
L0004B International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCM (PD 03 / 2027 2	13/01/2003	31/01/2002
PCT/EP 03/00278 Applicant	13/01/2003	31/01/2002
Applicant	•	
KRATON POLYMERS RESEARCH I	3.V.	
This International Search Report has been according to Article 18. A copy is being tra	n prepared by this International Searching Auth Insmitted to the International Bureau.	nority and is transmitted to the applicant
This International Search Report consists	cf a total of 9 sheets.	
X It is also accompanied by	a copy of each prior art document cited in this	report.
Basis of the report		
a. With regard to the language, the i	international search was carried out on the bas ess otherwise indicated under this item.	is of the international application in the
the international search w Authority (Rule 23.1(b)).	as carried out on the basis of a franslation of th	ne international application furnished to this
 b. With regard to any nucleotide and was carried out on the basis of the 		ternational application, the international search
,	nal application in written form.	
filed together with the inte	rnational application in computer readable form	n.
furnished subsequently to	this Authority in written form.	
<u> </u>	this Authority in computer readble form.	·
the statement that the sub international application as	sequently furnished written sequence listing do s filed has been furnished.	bes not go beyond the disclosure in the
the statement that the info furnished	rmation recorded in computer readable form is	identical to the written sequence listing has been
2. Certain claims were four	nd unsearchable (Ses Box I).	
3. Unity of invention is lack	ding (see Box II).	·
		;
4. With regard to the title,		W
In the text is approved as sui	bmitted by the applicant.	,
the text has been establish	hed by this Authority to read as follows:	·
·		
5. With regard to the abstract,	•	
X the text is approved as sui	omitted by the applicant.	
the text has been establish	ned, according to Rule 38.2(b), by this Authority date of mailing of this international search repo	y as it appears in Box III. The applicant may, ort, submit comments to this Authority.
6. The figure of the drawings to be public	shed with the abstract is Figure No.	
as suggested by the applic	cent.	None of the figures.
because the applicant fails	o to suggest a ligure.	
because this figure better	characterizes the invention.	

Form PCT/ISA/210 (first sheet) (July 1998)

International Application No

PCT/EP 03/00278

a. CLASSIFICATION OF SUBJECT MATTER
1PC 7 . CO8L53/02 CO8F297/04 B32B27/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (dissillation system tobowed by classification symbols) IPC 7 COBL CO9D CO9J CO8F CO9K B32B G09F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and I where practical, search terms used)

EPO-Internal, WPI Data, PAJ

	ENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to datm No.	
P,X	WO 02 28965 A (KRATON POLYMERS RES B V; HANDLIN DALE LEE JR (US); DJIAUW LIE KHON) 11 April 2002 (2002-04-11) * (same applicant, same invention - invalid present application priority date); pg.2,line 30- pg.3,line 2; claims 1-8; pg.5,line 16-32; pg.4,line 29- pg.5,line 15; examples; pg.10,line 22-23 * page 6, line 22-page 8, line 5; claim 8	1-4	
X	US 5 346 964 A (SHIBATA TOORU ET AL) 13 September 1994 (1994-09-13) * column 7, line 30, particularly "films,sheets"; column 1, line 61 - column 2, line 1; column 2, line 31-38; column 3, line 9-12, 40-44; column 3, line 55 - column 4, line 6; abstract * column 7, line 44-49,51-59	1-4	

Further documents are listed in the continuation of box C.	Ratent family members are listed in annex.			
Special categories of cited documents: 'A' document defining the general state of the lart which is not considered to be of particular relevance 'E' earlier document but published on or after the International filling date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other meens 'P' document published prior to the international filling date but later than the priority date claimed	 *T* later document published after the international filling date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the invention *X* document of particular relevance; the cialmed invention cannot be considered novel or cannot be considered to involve an invantive step when the document is taxan alone *Y* document of particular relevance; the cialmed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combined with one or more other such documents, such combination being obvious to a person sidtled in the art. *8* document member of the same patent family 			
Date of the actual completion of the international search	Date of maling of the international search report			
8 January 2004	15. 01. 2004			
Name and mailing address of the ISA European Patent Office, P.B. 5816 Patentiaan 2 NL - 2220 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016	Authorized officer Hammond, A			

2

International Application No PCT/EP 03/00278

Charlon of document, with indication, where appropriate, of the relevant passages EP 1 061 099 A (KUREHA CHEMICAL IND COLTD) 20 December 2000 (2000-12-20) * claims 1,2,4,3-17, particularly films and laminated films; page 4, line 9-31, 42-57; page 2, line 1-8 * abstract US 6 042 907 A (BLACKWELDER MAURICE W ET AL) 28 March 2000 (2000-03-28) * abstract; claims 1-5 * column 5, line 41-43 US 6 406 653 B1 (BLACKWELDER MAURICE W ET AL) 18 June 2002 (2002-06-18) * abstract; claims 7,9,10 * column 5, line 43-45 WO 01 09239 A (ESNEAULT CALVIN P; MAUGANS REXFORD A (US); HO THOI H (US); PATEL R)		1-4 1-4 1-4	
EP 1 061 099 A (KUREHA CHEMICAL IND COLTD) 20 December 2000 (2000-12-20) * claims 1,2,4,3-17, particularly films and laminated films; page 4, line 9-31, 42-57; page 2, line 1-8 * abstract US 6 042 907 A (BLACKWELDER MAURICE W ET AL) 28 March 2000 (2000-03-28) * abstract; claims 1-5 * column 5, line 41-43 US 6 406 653 B1 (BLACKWELDER MAURICE W ET AL) 18 June 2002 (2002-06-18) * abstract; claims 7,9,10 * column 5, line 43-45 WO 01 09239 A (ESNEAULT CALVIN P; MAUGANS		1-4	
LTD) 20 December 2000 (2000-12-20) * claims 1,2,4,3-17, particularly films and laminated films; page 4, line 9-31, 42-57; page 2, line 1-8 * abstract US 6 042 907 A (BLACKWELDER MAURICE W ET AL) 28 March 2000 (2000-03-28) * abstract; claims 1-5 * column 5, line 41-43 US 6 406 653 B1 (BLACKWELDER MAURICE W ET AL) 18 June 2002 (2002-06-18) * abstract; claims 7,9,10 * column 5, line 43-45 WO 01 09239 A (ESNEAULT CALVIN P; MAUGANS		1-4	Ī
AL) 28 March 2000 (2000-03-28) * abstract ; claims 1-5 * column 5, line 41-43 US 6 406 653 B1 (BLACKWELDER MAURICE W ET AL) 18 June 2002 (2002-06-18) * abstract ; claims 7,9,10 * column 5, line 43-45 WO 01 09239 A (ESNEAULT CALVIN P ; MAUGANS			Ţ
AL) 18 June 2002 (2002-06-18) * abstract ; claims 7,9,10 * column 5, line 43-45 WO 01 09239 A (ESNEAULT CALVIN P ; MAUGANS		1-4	
		1	
* abstract, particularly elastic films; claims 1,5 * page 2, line 11,12		1-4	
EP 0 863 193 A (SHELL INT RESEARCH) 9 September 1998 (1998-09-09) * page 6, line 2, particularly "food and beverage containers"; abstract; page 2, line 29-49, 52-54; page 3, line 54-56; page 4, line 29-34 * page 4, line 29-34		4.4	
US 4 970 259 A (MITCHELL NEIL F ET AL) 13 November 1990 (1990-11-13) * column 3, line 1-9; column 4, line 29-36, 42-46; examples; column 6, line 49-68 *		1-4	
EP 0 413 262 A (KURARAY CO) 20 February 1991 (1991-02-20) * abstract * page 3, line 1-50		1-4	
EP 0 822 227 A (SHELL INT RESEARCH) 4 February 1998 (1998-02-04) * page 2, line 46-56 * page 3, line 1-8; table 1		1-3	
US 5 627 235 A (HIMES GLENN R) 6 May 1997 (1997-05-06) * column 1, line 10-13; column 1, line 60 - column 2, line 5; column 2, line 55-65* abstract; table 1		1-3	
	9 September 1998 (1998-09-09) * page 6, line 2, particularly "food and beverage containers"; abstract; page 2, line 29-49, 52-54; page 3, line 54-56; page 4, line 29-34 US 4 970 259 A (MITCHELL NEIL F ET AL) 13 November 1990 (1990-11-13) * column 3, line 1-9; column 4, line 29-36, 42-46; examples; column 6, line 49-68 * EP 0 413 262 A (KURARAY CO) 20 February 1991 (1991-02-20) * abstract * page 3, line 1-50 EP 0 822 227 A (SHELL INT RESEARCH) 4 February 1998 (1998-02-04) * page 2, line 46-56 * page 3, line 1-8; table 1 US 5 627 235 A (HIMES GLENN R) 6 May 1997 (1997-05-06) * column 1, line 10-13; column 1, line 60 - column 2, line 5; column 2, line 55-65* abstract; table 1	9 September 1998 (1998-09-09) * page 6, line 2, particularly "food and beverage containers"; abstract; page 2, line 29-49, 52-54; page 3, line 54-56; page 4, line 29-34 * page 4, line 29-34 US 4 970 259 A (MITCHELL NEIL F ET AL) 13 November 1990 (1990-11-13) * column 3, line 1-9; column 4, line 29-36, 42-46; examples; column 6, line 49-68 * EP 0 413 262 A (KURARAY CO) 20 February 1991 (1991-02-20) * abstract * page 3, line 1-50 EP 0 822 227 A (SHELL INT RESEARCH) 4 February 1998 (1998-02-04) * page 2, line 46-56 * page 3, line 1-8; table 1 US 5 627 235 A (HIMES GLENN R) 6 May 1997 (1997-05-06) * column 1, line 10-13; column 1, line 60 - column 2, line 5; column 2, line 35-65* abstract; table 1	9 September 1998 (1998-09-09) * page 6, line 2, particularly "food and beverage containers"; abstract; page 2, line 29-49, 52-54; page 3, line 54-56; page 4, line 29-34 US 4 970 259 A (MITCHELL NEIL F ET AL) 13 November 1990 (1990-11-13) * column 3, line 1-9; column 4, line 29-36, 42-46; examples; column 6, line 49-68 * EP 0 413 262 A (KURARAY CO) 20 February 1991 (1991-02-20) * abstract * page 3, line 1-50 EP 0 822 227 A (SHELL INT RESEARCH) 4 February 1998 (1998-02-04) * page 2, line 46-56 * page 3, line 1-8; table 1 US 5 627 235 A (HIMES GLENN R) 6 May 1997 (1997-05-06) * column 1, line 10-13; column 1, line 60 - column 2, line 5; column 2, line 55-65* abstract; table 1

2

International Application No PCT/EP 03/00278

		PCIZEP 03	
C.(Centinu	MION) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with Indication, where appropriate, of the relevant passages		Relevant to claim No.
A	WO 01 19919 A (SHELL INT RESEARCH) 22 March 2001 (2001-03-22) * abstract ; claims *		1-3
4	EP 0 254 346 A (SHELL INT RESEARCH) 27 January 1988 (1988-01-27) * claims 1-10 ; abstract *		1-3
	·		
	·		
	·		
	·		

2



International application No. PCT/EP 03/00278

INTERNATIONAL SEARCH REPORT	101,21 00,002,0
Box I Observations where certain claims were found unsearchable (Continu	iztion of Item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under	Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, not required to be searched by this Authority, not required to be searched by this Authority.	amaly:
Claims Nos.: because they relate to parts of the International Application that do not comply with the an extent that no meaningful international Search can be carried out, specifically:	ne prescribed requirements to such
3. Ciaims Nos.: because they are dependent claims and are not drafted in accordance with the second	nd and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of Item	2 of first sheet)
This International Searching Authority found multiple inventions in this international application	n, as follows:
see additional sheet	·
As all required additional search fees were timely paid by the applicant, this Internation searchable claims.	enal Searce Report covers all
2. As all searchable claims could be searched without effort justifying an additional fee, of any additional fee.	this Authority dic not invite payment
3. X As only some of the required additional search fees were timely paid by the applicant covers only those claims for which fees were paid, specifically claims Nos.: 1-4	t, this International Search Report
4. No required additional search fees were timely paid by the applicant. Consequently, the restricted to the invention first mentioned in the claims; it is covered by claims Nos.:	ihis International Search Report is
Remark on Protest The additional search fees were X No protes: accompanied the pay	accompanied by the applicant's protest.

International Application No. PCTEP 03 D0278

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-3

A composition suitable for the manufacture of a monolayer, or of multilayer films for food-wrap applications. The said composition comprising from 5 to 40 wt.% of a styrenic block copolymer of either molecular structure S-EB-S ...(1), or of molecular structure (S-EB)nX ...(2) as described in the application claim 1; a polyolefin in an amount of at least 40 wt.%; and optionally 0-25 %wt. of a resin which is compatible with the hydrogenated poly(butadiene) blocks, wherein all wt.% are relative to the weight of the complete composition.

2. Claim: 4

A monolayer film, or a multilayer film comprising at least one layer based on a composition according to any one of the claims 1-3.

3. Claims: 5-8

A styrenic block copolymer as described in application claims 5-8.

Information on patent family members

International Application No PCT/EP 03/00278

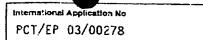
						FCI/EF	03/002/8
	ateni document d in seerch report		Publication date		Patent family member(s)		Publication date
WO	0228965	Α	11-04-2002	AU	2434702	2 A	15-04-2002
				ΕP	1322707		02-07-2003
				WO	0228965	A1	11-04-2002
US	5346964	Α	13-09-1994	JP	2305814		19-12-1990
				JP	2754723		20-05-1998
				US DE	5306779 69032963		26-04-1994 08-04-1999
				DE	69032963		19-08-1999
				DE	69033210		19-08-1999
				DE	69033210		09-12-1999
				ĒΡ	0398758		. 22-11-1990
				E۶	0709413	3 A1	01-05-1996
				US	5191024	A	02-03-1993
				J۶	2764746	5 52	11-06-1998
				· JP	3072512		27-03-1991
				JP	3127872		29-01-2001
				JP	10182925		07-07-1998
				JP	3128760		29-01-2001 07-07-1998
				JP	10182926		0/-0/-1998
EΡ	1061099	A	20-12-2000	EP	1061099		20-12-2000
				CN	1122076		24-09-2003
				WO	9945064		10-09-1999
US	6042907	Α	28-03-2000	US	6406653	B B1	18-06-2002
US	6406653	B1	. 18-06-2002	US	6042907	Α	28-03-2000
WO	0109239	Α	08-02-2001	AU	5148800		02-01-2001
	N.			AU	5588100		02-01-2001
				AU BR	6615400 0012087		19-02-2001 02-04-2002
				BR	0012087		07-05-2002
				BR	0013064		02-04-2002
				CA	2377553		08-02-2001
				CN	1355826		26-06-2002
				CN	1355827		26-06-2002
				CN	1365378		21-08-2002
				CZ	20020339		17-07-2002
				EP	1198516		24-04-2002
				EP EP	1189988 1208157		27-03-2002 29-05-2002
				JP	2003502470		21-01-2003
				JP	2003502470		21-01-2003
				JP	2003506513		18-02-2003
				NO	20020407		26-03-2002
				TW	506990		21-10-2002
				US	2002147273	3 A1	10-10-2002
				WO	0077094		21-12-2000
				MO	0077095	AI	21-12-2000
				WO	0109239		08-02-2001
				US US	2003119971 6426390		26-06-2003 30-07-2002
				US	2001048991		06-12-2001
				US	2001046991		23-05-2002
				US	2002061982		23-05-2002
				AÜ	6613800		20-11-2001

information on patent family members

International Application No PCT/EP 03/00278

Patent documer cited in search rec		Publication date		Patent family member(s)		Publication date
WO 0109239	A		CA		A1	15-11-2001
MG 0103533	A		EP	2406666 1280856		05-02-2003
			WO	0185843		15-11-2001
			ÜS	2003060529		27-03-2003
			US	6437014		20-08-2002
EP 0863193	Α	09-09-1998	US	5777043		07-07-1998
2, 0000175	,	05 05 1550	ΑÚ	699760		17-12-1998
			AU	5641098		10-09-1998
			BR	9800829		05-10-1999
			CN	1195012		07-10-1998
			DE	69809982	D1	23-01-2003
•			DΕ	69809982	T2	28-08-2003
•			ΕP	0863193		09-09-1998
			ES	2189078		01-07-2003
			TR	9800375		21-05-1999
			TW	428021	R	01-04-2001
US 4970259	Α	13-11-1990	US	5068138	A	26-11-1991
EP 0413252	Α	20-02-1991	JP	2779001	B2	23-07-1998
			JP	3076744	A	02-04-1991
			DE	69025006		07-03-1996
			DE	69025006		19-09-1996
			EP	0413262	A2	20-02-1991
EP 0822227	Α	04-02-1998	BR	9705233	Α	29-06-1999
			CA	2211944	Ą1	31-01-1998
			EP	0822227		04-02-1998
			JP	10077382		24-03-1998
			TR	9700720		21-02-1998
		•	TW	416971		01-01-2001
	و برب مدار مدار سال سربار بربي و بربار		US	5926707	A	20-07-1999
US 5627235	A	06-05-1997	US	5589542		31-12-1996
			AT	163031 687131		15-02-1998 19-02-1998
			AU AU	1107395		23-05-1995
			BR	9407936		25-05-1995
			CA	2175580		11-05-1995
		-	CN	1136821		27-11-1996
			DE -	69408474		12-03-1998
•			DE	69408474		04-06-1998
			DK	726927	T3	11-05-1998
			MO	9512645		11-05-1995
			EP	0726927		21-08-1996
			ES	2111966		16-03-1998
	•		JP		Ţ	06-05-1997
			NO	961760		28-06-1996
			RU US	2160755 RE36757		20-12-2000 27-06-2000
						17-04-2001
Wn 0110010	Δ	22-03-2001	ΔΙΙ	/hhhum		
WO 0119919	Α	22-03-2001	AU BR	7656900 0013990		
 WO 0119919	A	22-03-2001	BR	0013990	A	14-05-2002
WO 0119919	A	22-03-2001			A T	
WO 0119919	A	22-03-2001	BR CN	0013990 1 37498 5	A T A1	14-05-2002 16-10-2002

information on patent family members



Patent document died in search report		Publication date		Patent family member(s)	Publication date
WO 0119919	Α	· · · · · · · · · · · · · · · · · · ·	US	6630532 B1	07-10-2003
EP 0254346	A	27-01-1988	AU	593666 B2	15-02-1990
			ΑÜ	7530387 A	14-01-1988
			BR	8703432 A	22-03-1988
			CA	1309530 C	27-10-1992
			DE.	3783527 D1	25-02-1993
			DE	3783527 T2	13-05-1993
			EP	0254346 A2	27-01-1988
			ES	2053521 T3	01-08-1994
			JP	2665660 B2	22-10-1997
			J٢	63033463 A	13-02-1988
•			KR	9610840 B1	09-08-1996

Form PCT//SA/210 (patent family arriex) (July 1862)